

What is claimed is:

1. A light bar assembly comprising:
an elongated base having front and rear elongated slots;
5 first and second electronics enclosures mounted to said base at longitudinally spaced positions thereof;
a top panel having front and rear elongated slots and supported by said enclosures and generally parallel to said base;
at least one cover slidably received in said base and top panel
10 front slots; and
at least one cover slidably received in said base and top panel rear slots to define an enclosure therebetween.
2. The light bar assembly of claim 1, wherein said base is an
15 extruded one-piece member.
3. The light bar assembly of claim 1, wherein said top panel is an extruded one-piece member.
- 20 4. The light bar assembly of claim 1, wherein said base and top panel each have opposed ends and further comprising a warning light assembly mounted to each of said ends.
- 25 5. The light bar assembly of claim 1, wherein said electronics enclosures each enclose a power supply.
6. The light bar assembly of claim 5, wherein each said electronics enclosure defines an interior space and includes an outside surface, said power supply comprising at least one heat generating component and a
30 heat sink comprising a metal plate,
wherein said metal plate is arranged on said outside surface and an opening is provided in said enclosure, said heat generating component arranged in said interior space adjacent said opening and

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joined to said heat sink so that a thermal transfer interface is provided between said component and said heat sink.

7. The light bar assembly of claim 5, wherein said top panel
5 comprises a metal and each said power supply comprises heat transfer interface means for defining a heat transfer interface with said top panel through each said electronics enclosure, whereby said top panel serves as a heat sink for said power supplies.

10 8. The light bar assembly of claim 1, wherein said base defines a length between opposed ends and a width between said elongated slots, said base further comprising at least two tracks substantially traversing the length of said base transversely inwardly from and parallel to said elongated slots, each said electronics enclosure comprising a plurality of
15 feet, each said foot configured for slidable engagement with one said track, whereby each said electronics enclosure is retained to said base by the engagement of said feet with said tracks and each said electronics enclosure is slidable relative to said base.

20 9. The light bar assembly of claim 1, wherein said electronics housing has a height and said height defines a dimension of said enclosure extending between said base and said top panel.

10. A method of assembling a light bar comprising the steps of:
25 providing a selected length of extruded base and top plate;
providing at least one electronics enclosure;
securing said at least one electronics enclosure to said extruded base; and
securing said top plate to said at least one electronics enclosure,
30 whereby said electronics enclosure serves as a structural support between said base and top plate and determines a distance between said base and top plate.

11. The method of claim 10, wherein said step of providing at least one electronics enclosure comprises equipping said electronics enclosure with an externally mounted heat sink plate and said step of securing said top plate to said at least one electronics enclosure
5 comprises establishing a heat transfer interface between said electronics heat sink plate and said top plate.
12. The method of claim 10, further comprising the steps of:
providing lighting components configured for mounting between
10 said extruded base and top plate; and
slidably positioning said lighting components relative to said extruded base and top plate.
13. The method of claim 10, wherein said at least one electronics enclosure comprises an upper surface including fastener-receiving
15 mounting brackets and said step of securing said top plate to said at least one electronics enclosure comprises extending fasteners through said top plate to engage said mounting brackets.
14. The method of claim 13, wherein the step of providing at least one
20 electronics enclosure comprises providing two said electronics enclosures.
15. A light bar comprising:
at least one heat conductive structural member; and
25 at least one power supply surrounded by an enclosure, said power supply comprising at least one heat generating component and a heat sink comprising a metal plate, wherein said metal plate is arranged outside said enclosure and said at least one heat generating component is arranged inside said enclosure and an opening through said enclosure
30 facilitates heat transfer from said at least one heat generating component to said metal plate,
wherein said at least one structural member is supported by said enclosure with said metal plate in contact with said at least one structural

member to define a heat transfer interface between said metal plate and said at least one structural member, whereby heat generated by said at least one heat generating component is dissipated by said at least one structural member.

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16. The light bar of claim 15, wherein said at least one structural member comprises an extruded aluminum top plate.

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17. The light bar of claim 15, said at least one electronics enclosure comprises two electronics enclosures, each said electronics enclosure comprising a top surface having a periphery and at least one fastener-receiving mounting bracket projecting from said periphery adjacent said top surface, wherein said top plate is fixed to both said electronics enclosures by fasteners passing through said top plate to engage said mounting brackets.

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18. The light bar of claim 17, wherein said top plate defines a length between opposed ends and said electronics enclosures are spaced from each other along said length.